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### REMARKS

The present invention is a network for communicating with a plurality of radio telephones via a respective communication channels over a carrier, a controller for operation in the network wherein the network communicates with a plurality of radio telephones via respective communication channels over a carrier, a radio telephone for operation with the network which initiates a change in data rate of a channel from a first data rate to a second data rate and a method of communicating with a plurality of radio telephones via respective communication channels over a carrier. An embodiment of the invention includes a network WIO2 or GSM operator network 18 for communicating with a plurality of radio telephones 4 and 7 via respective communication channels over a carrier. The channels can operate at a first or second data rate such that the carrier can transmit a single communication channel operating at the first data rate or two communication channels operating at the second data rate. The network comprises a controller 7 responsive to an initiation of the channel with a second network 18 for initiating a change in the data rate of the transmitted channel from the first data rate to the second data rate. See page 11, lines 6-30, through page 12, lines 1-7, of the original specification.

Claims 1-6, 8 and 9 stand rejected as being vague and indefinite "since each claim recites only a single means (i.e. a controller) and thus encompasses all possible means for performing a desired function". These grounds of rejection are traversed for the following reasons.

Independent claims 23 and 30, which correspond to independent claims 1 and 8 respectively define a combination of limitations of a network for

communicating with the plurality of radio telephones and a controller for operation in a network. A claim reciting a combination of limitations, contrary to the Examiner's contention, does not constitute a single means. Accordingly it is submitted that the Examiner's rejection of claim 1 is improper. Moreover, the controller of claim 23 is not a means plus function claim as contended by the Examiner. There is a presumption that claims that do not recite the word "means" are not, in fact, means plus function claims. Moreover, a controller is a well known device in the field of communications. See the enclosed page 185 from *Newton's Telecom Dictionary* which defines a controller, *inter alia*, as "in the truest sense, a device which controls the operation of another piece of equipment. The controller of the claims is generically readable upon the gatekeeper 7 which is a known device. Similarly, claim 30 defines a controller for operation in the network wherein the network communicates with a plurality of radio telephones and comprises means responsive to initiation of a channel with a second network. Therefore, the scope of claim 30 is similar to claim 23 in that it covers a plurality of limitations with one of those limitations being a means plus function claim. Accordingly, it is submitted that the Examiner's rejection is improper regarding claim 6.

Claim 11 stands rejected on grounds of improper claim dependency. Newly submitted claims 23-41 do not correspond to the subject matter of claim 11.

Claims 1-6, 8-11 and 13-22 stand rejected under 35 U.S.C. §102 as being anticipated by WO 99/53700. These grounds of rejection are traversed for the following reasons.

Independent claims 23, 30, 37 and 38 respectively recite the combination of a "controller responsive to an initiation of the channel with a second network for

initiating a change in the data rate of a transmitted channel from the first data rate to the second data rate (claim 23)"; "means responsive to an initiation of a channel with a second network for initiating a change in the data rate of a transmitted channel from the first data rate to the second data rate (claim 30)"; "a network which initiates a change in data rate of a channel from a first data rate to a second data rate in response to an initiation of a channel with a second network (claim 37)" and "change in the data rate in response to initiation of the channel with a second network (claim 38)". This subject matter has no counterpart in Balck.

The Examiner in the rejection of claims 5 and 16-18 over Balck contends that Balck "discloses the predetermined condition is the initiation of a channel with a second network" with the Examiner relying on page 7, lines 1-6, of Balck. However, the Examiner's reliance thereon is misplaced for the following reasons.

Page 7, lines 1-6, state:

The gateway MSC 36 is the interface point in the mobile radio network for calls to mobile subscribers. although the GMSC 36 is shown as a separate node for clarity of illustration, it may be located with an MSC 38. Each mobile switching center 38 performs telephony switching functions associated with calls involving a mobile station (MS) 46 including interfacing with other telecommunications networks 32 and 34 and routing mobile-originated calls.

There is no discussion of changing of a data rate of the GMSC 36 or the MSC 38. What is described therein is that the GMSC is an interface point in the radio network for calls to mobile subscribers and further, that each mobile switching center performs telephony switching functions associated with calls involving a mobile station, including interfacing with other telecommunications networks and routing mobile-originated calls. This disclosure does not mention and would not be understood by a person of ordinary skill in the art to cover the initiation of a change

in data rate of a transmitted channel from a first data rate to a second data rate within a first network responsive to an initiation of a channel with a second network as substantively recited in the independent claims. Accordingly, the newly submitted claims are not anticipated by Balck.

Moreover, a person of ordinary skill in the art would not be motivated to modify the teachings of Balck to arrive at the subject matter of the independent claims except by impermissible hindsight. As stated above, the referenced portion of Balck does not teach the switching of data rates based upon the claimed condition of initiation of a channel with a second network.

While Balck does disclose the switching of data rates when the traffic load exceeds a threshold 16, such switching is not predicated upon the initiation of a channel in another network. Accordingly, while a person of ordinary skill in the art would understand that the switching of data rates is suggested by Balck to deal with traffic conditions, that teaching would not be understood and would not motivate a person of ordinary skill in the art to modify the teachings of Balck to arrive at the claimed subject matter of the independent claims involving initiation of a channel with a second network except by impermissible hindsight.

The dependent claims define more specific aspects of the present invention which are neither anticipated nor rendered obvious by Balck.


In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the

filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (1289.39331X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read "Donald E. Stout", is written over a horizontal line.

Donald E. Stout  
Registration No. 26,422  
(703) 312-6600

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## Control Station / Conversational Mode Telex

Pin	Control Signal	From	To
4	Request-To-Send (RTS)	DTE	DCE
5	Clear-To-Send (CTS)	DCE	DTE
6	Data Set Ready (DSR)	DCE	DTE
8	Carrier Detect (CD)	DCE	DTE
20	Data Terminal Ready (DTR)	DTE	DCE
22	Ring Indicator (RI)	DCE	DTE

**Control Station** On a multi-access link, a station that is in charge of such functions as selection and polling.

**Control Tier** An AT&T term for the tier within the Universal Information Services network node that provides the transport network's connection control function.

**Control Unit** An architectural component of a processor chip which orchestrates processor activity and handles timing to make sure the processor doesn't overlap functions.

**Controlled Access** When access to a system is limited to authorized programs, processes or other systems (as in a network).

**Controlled Environment Vault** CEV. It is a low maintenance, water-tight concrete or fiberglass container typically buried in the ground which provides permanent housing for remote switches, remote line concentrators, pair gain and fiber transmission systems. Because it is buried, it can often be installed in utility easements or other places where local building laws may be a problem. This below ground room that houses electronic and/or optical equipment is under controlled temperature and humidity conditions.

**Controller** 1. In the truest sense, a device which controls the operation of another piece of equipment. In its more common data communications sense, a device between a host and terminals that relays information between them. It administers their communication. Controllers may be housed in the host, can be stand-alone, or can be located in a file server. Typically one controller will be connected to several terminals. The most common controller is the IBM Cluster Controller for their 370 family of mainframes. In an automated radio, a controller is a device that commands the radio transmitter and receiver, and that performs processes, such as automatic link establishment, channel scanning and selection, link quality analysis, polling, sounding, message store and forward, address protection, and anti-spoofing. 2. Participant in a conference call who sets up the conference call.

**Controller Card** Also called a hard disk/diskette drive controller. It's an add-in card which controls how data are written to and retrieved from your PC's various floppy and hard drives. Controller cards come in various flavors, including MFN and SCSI. Controller cards are the devices used to format hard drives. Controller cards are not hard drive specific (except within categories). Controller cards will format many drives. But once you have a hard drive that has been formatted by that one controller card, it tends to prefer talking to that controller card forever. If you switch your hard disk to another machine, switch the controller card along with it. If you switch your hard disk to another machine, but not the controller card, then format the hard disk. That's not a "100% Do It Or Else You'll Be Disappointed" rule. But just a "Play It Safe and Switch Them" rule.

**Controllerless Modem** A modem that shifts all the protocol management, error detection and correction, and data compression onto software running on the system's CPU. This allows the modem manufacturer to make a much cheaper modem that does not require the memory or processing power of a traditional modem. Also known as a soft modem.

**Contouring** In digital facsimile, density step lines in received copy resulting from analog-to-digital conversion when the original image has observable gray shadings between the smallest density steps of the digital system.

**CONUS** A term for CONTiguous United States (lower 48 states). See Contiguous United States.

**Convection Cooling** Design techniques used in switching system construction to permit safe heat dissipation from the equipment without the need for cooling fans.

**Convactor** The device which covers the steam heating radiator in buildings and typically sits underneath a window. Also called a weathermaster.

**Convactor Area** An area allocated for heat circulation and distribution. Convactor areas, typically built into a wall, can be used as a satellite location only if a more suitable area is unavailable.

**Convention** A rule of conduct or behavior which has been reached by general agreement, commonly by a standards-making body, whether formal (e.g., the ITU) or ad hoc (e.g., Bell Telephone Laboratories) in nature. For example, the T-1 framing conventions were developed by Bell Labs for use within the Bell System network in North America, and later were formalized at the international level by the ITU-T. See also Bell Telephone Laboratories, ITU-T, and T-1.

**Convergence** 1. A measure of the clarity of a color monitor. A measure of how closely the red, green and blue guns in a color monitor track each other when drawing a color image. The other measures are focus and dot pitch.

2. A routing term. The point at which all the internetworking devices share a common understanding of the routing topology. The slower the convergence time, the slower the recovery from link failure.

3. The word to describe a trend - now that most media can be represented digitally - for the traditional distinctions between industries to blur and for companies from consumer electronics, computer and telecommunications industries to form alliances, partnerships and other relationships, as well as to raid each others markets.

4. The word "convergence" as a fashion word of the "new" management was set in motion in 1992 when Tele-Communications Inc. chairman John C. Malone told a cable-show audience that his vision of all-digital, fiber-optic networks would enable TCI and other cable operators to offer 500 TV channels, interactive programming, electronic mail, and telephony. According to Business Week Magazine of June 23, 1997 that picture of digital convergence was so compelling that cable, media and phone companies promptly hopped on the bandwagon. Business Week continued, "Several billion dollars later, it became clear that convergence was a bust: Cable companies, perennially strapped for cash, scaled back on their plans to upgrade their networks to handle huge amounts of interactive data. Phone companies that had hoped to offer television service - on their own wires or in joint ventures with cable companies - went back to their core businesses." However, such concerns should never let a good word die. In the May 17, 1998 issue of The New York Times, Richard C. Notebaert, chairman and chief executive of the Ameritech Corporation, wrote, "Conventional wisdom holds that convergence - the gradual blurring of telecommunications, computers and the Internet - is primarily about technology and the inevitable clash of voice and data networks. But that narrow viewpoint misses the bigger picture...Convergence is about fundamental changes in the way we work - even behave." Now the latest concept of convergence is that all communications - the Internet and the PSTN (the public switched telephone network) - shall run over one IP telephony network. As Notebaert says, "Our public voice network will become the public multimedia network and the Internet as we know it will cease to exist. With such a robust and ubiquitous network, we'll never have to go to the time and trouble of dialing into a private network when we want to surf the Web. In essence, we'll always be on line. And that will let us develop applications we can't even dream of today." No industry is immune from the convergence fever. Every year, a trade magazine or two changes its name to include the word convergence in the hope that major profits will magically appear. By far the most interesting obsession with the word convergence was the formation of a trade industry association called the National Convergence Alliance. See NCA.

**Convergence Billing** Also known as convergence or composite billing. This is a fancy name for one phone company - local or long distance - providing a total communications bill to the customer. That total bill would include everything the customer buys in telecommunications services

— from local, long distance, Internet access, cell phones, paging, etc. In late 1996, the belief developed in the telecom industry that if you "controlled" the bill to the customer, you would be in far better shape to sell the customer more services. The concept has some validity, especially if you also believe in fairies.

**Convergence Sublayer** CS. An ATM term. SEE CS.

**Convergent** Convergent billing software is software which allows telecom companies (such as local and long distance companies) to bundle services, such as long distance, cellular, paging and cable, together onto a single monthly invoice. Bundling helps service providers offer competitive rates, boost revenue per customer and reduce customer turnover. Customers love the simplicity and convenience of one bill for all their telecom services. One company calls itself a "one stop shop with an integrated bill."

**Conversation Path** The route from originating port to terminating port for a two-way call. A conversation thus typically requires two ports on most PBXs.

**Conversation Time** The time spent on a conversation from the time the person at the other end picks up to the time either you hang up. Conversation time plus dialing, searching and ringing time equal the time your circuit will be used during a call.

**Conversational Mode** Also called chat mode. Interactive data communications carried on between data terminals in a fashion similar to speech conversation.

**Conversational Mode Telex** An MCI International product providing real time exchange between Telex terminals or other compatible devices that allows instantaneous, two-way conversations in writing.



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